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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,392	06/19/2006	Gary Wingett	042933/311926	8170
826	7590	03/31/2009	EXAMINER	
ALSTON & BIRD LLP BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000			FISHMAN, MARINA	
			ART UNIT	PAPER NUMBER
			2832	
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			03/31/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/583,392	<b>Applicant(s)</b> WINGETT, GARY	
	<b>Examiner</b> Marina Fishman	<b>Art Unit</b> 2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-4 and 6-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***General status***

1. This is a Non - Action on the Merits. Claims 1 – 4 and 6 - 18 are pending in the case and are being examined.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 4, 6, 12 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto [US 5,744,765] in view of Vance [US 6,313,731].

Regarding Claim 1, Yamamoto [Figures 8-12] discloses an annular dome switch having:

- an upper dome sheet [5];
- an underlying substrate [2];
- wherein the upper dome sheet extends from the underlying substrate defining a raised cross-sectional shape, the raised cross-sectional shape extending at least substantially along a length of an annular shaped path [Figure 9];
- wherein the underlying substrate comprises an annular concentric connection pads [Figure 12, 65A, 65B]; and

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- the upper dome sheet is configured to make electrical contact with the connection pads [65A, 65B] of the underlying substrate when the upper dome sheet is depressed towards the underlying substrate.

Regarding Claim 1, Yamamoto discloses the instant claimed invention except for substantially continuous annular concentric connection pads. Vance [Figure 9] discloses an underlying substrate with substantially continuous annular concentric connection pads. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide substantially continuous annular concentric connection pads in Yamamoto, as suggested by Vance, in order have more precise direction detection [Vance column 1, line 64 and 65.]

Regarding Claim 2, Yamamoto discloses the dome switch surrounds at least one other dome switch [3, 8]. Regarding Claims 3 and 4, Yamamoto discloses the dome switch comprises partial or complete annulus [complete annulus includes a partial annulus]. Regarding Claim 6, Yamamoto discloses a select means [8, 12] is activated upon actuation of the annular dome switch. Regarding Claim 12, Yamamoto discloses an input apparatus comprising an annular\_dome switch as claimed in claim 1. Regarding Claim 18, Yamamoto discloses the activation of the dome switch comprises temporarily modifying the electrically conductive or electrically capacitive properties of an electronic element.

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4. Claims 7 – 11 and 13 - 17 rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto [US 5,744,765] in view of Vance [US 6,313,731] as applied to claim 1 above, and further in view of Chandler [US 4,246,452].

Regarding Claim 7 - 11 and 13 - 15 and 17, Yamamoto and Vance disclose the instant claimed invention except for a rotator wheel. Chandler discloses a rotator wheel [22] to activate the switches. Yamamoto discloses switch to be an annular switch and Chandler discloses rotator wheel with a planar upper surface, which is exposed and can be accessed by a user. Chandler also discloses use of decoder and processor to detect the rotational movement of the wheel. It would have been obvious to one of ordinary skill in the art to use a rotator wheel, instead of tilting knob in Yamamoto, as suggested by Chandler, so as to provide a directional signal control [Chandler column 2, line27-28]. Regarding Claim 16, the bridge contact disclosed by Yamamoto though stationary, providing bridge contact on pushing section [33] would be a matter of design choice, so as to reduce number of parts.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1 - 4 and 6 – 18 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marina Fishman whose telephone number is (571)272-1991. The examiner can normally be reached on 7-5 M-T.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Elvin G Enad/  
Supervisory Patent Examiner, Art Unit 2832

/Marina Fishman/  
Examiner, Art Unit 2832  
March 19, 2009